

Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses: 2002

Issued August 2004

EC02-311-322225

2002 Economic Census

Manufacturing

Industry Series



U S C E N S U S B U R E A U

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU



Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

| Industry and year ¹ | Com- panies ² | All estab- lish- ments ³ | All employees | | Production workers | | | Value added (\$1,000) | Total cost of materials (\$1,000) | Total value of shipments (\$1,000) | Total capital expendi- tures (\$1,000) |
|---|-----------------------------|--|---------------------|----------------------|---------------------|------------------|--------------------|-----------------------------|--|---|---|
| | | | Number ⁴ | Payroll (\$1,000) | Number ⁴ | Hours (1,000) | Wages (\$1,000) | | | | |
| 322225, Laminated aluminum foil manufacturing for flexible packaging uses | | | | | | | | | | | |
| 2002.. | 35 | 42 | 4 749 | 220 058 | 3 528 | 7 513 | 147 217 | 594 466 | 907 111 | 1 528 487 | 52 000 |
| 2001.. | N | N | 4 628 | 216 291 | 3 468 | 7 631 | 147 004 | 525 603 | 831 952 | 1 336 116 | 41 741 |
| 2000.. | N | N | 4 626 | 208 011 | 3 493 | 7 561 | 141 989 | 562 304 | 872 685 | 1 441 644 | 38 175 |
| 1999.. | N | N | 4 751 | 210 317 | 3 620 | 8 173 | 148 159 | 573 354 | 868 025 | 1 432 514 | 46 123 |
| 1998.. | N | N | 5 241 | 228 700 | 3 869 | 8 441 | 161 911 | 651 942 | 1 002 496 | 1 651 809 | 37 743 |
| 1997.. | 34 | 42 | 5 342 | 205 766 | 4 112 | 9 111 | 142 801 | 603 535 | 996 431 | 1 587 850 | 36 925 |

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

| Industry and geographic area | E ¹ | All establishments ² | | All employees | | Production workers | | | Value added (\$1,000) | Total cost of materials (\$1,000) | Total value of shipments (\$1,000) | Total capital expenditures (\$1,000) |
|---|----------------|---------------------------------|---------------------------|---------------------|-------------------|---------------------|---------------|-----------------|-----------------------|-----------------------------------|------------------------------------|--------------------------------------|
| | | Total | With 20 employees or more | Number ³ | Payroll (\$1,000) | Number ³ | Hours (1,000) | Wages (\$1,000) | | | | |
| 322225, Laminated aluminum foil manufacturing for flexible packaging uses | | | | | | | | | | | | |
| United States..... | — | 42 | 33 | 4 749 | 220 058 | 3 528 | 7 513 | 147 217 | 594 466 | 907 111 | 1 528 487 | 52 000 |
| New Jersey | 7 | 4 | 2 | 168 | 8 246 | 114 | 249 | 5 249 | 15 469 | 21 258 | 36 729 | 1 557 |
| Wisconsin | — | 3 | 3 | 428 | 21 852 | 309 | 699 | 14 023 | 49 708 | 67 238 | 116 246 | 2 445 |

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| Item | Value |
|--|---------------------|
| 322225, Laminated aluminum foil manufacturing for flexible packaging uses | |
| Companies ¹ | number.. 35 |
| All establishments ² | number.. 42 |
| Establishments with 1 to 19 employees | number.. 9 |
| Establishments with 20 to 99 employees | number.. 19 |
| Establishments with 100 employees or more | number.. 14 |
| All employees ³ | number.. 4 749 |
| Total compensation | \$1,000.. 297 343 |
| Annual payroll | \$1,000.. 220 058 |
| Total fringe benefits | \$1,000.. 77 285 |
| Production workers, average for year | number.. 3 528 |
| Production workers on March 12 | number.. 3 625 |
| Production workers on May 12 | number.. 3 526 |
| Production workers on August 12 | number.. 3 475 |
| Production workers on November 12 | number.. 3 474 |
| Production worker hours | 1,000.. 7 513 |
| Production worker wages | \$1,000.. 147 217 |
| Total cost of materials | \$1,000.. 907 111 |
| Materials, parts, containers, packaging, etc., used | \$1,000.. 858 860 |
| Resales | \$1,000.. 12 946 |
| Purchased fuels | \$1,000.. 10 113 |
| Purchased electricity | \$1,000.. 14 996 |
| Contract work | \$1,000.. 10 196 |
| Quantity of electricity purchased for heat and power | 1,000 kWh.. 261 888 |
| Quantity of electricity generated less sold for heat and power | 1,000 kWh.. - |
| Total value of shipments | \$1,000.. 1 528 487 |
| Primary products value of shipments | \$1,000.. 1 125 346 |
| Secondary products value of shipments | \$1,000.. 379 510 |
| Total miscellaneous receipts | \$1,000.. 23 631 |
| Value of resales | \$1,000.. 17 737 |
| Contract receipts | \$1,000.. D |
| Other miscellaneous receipts | \$1,000.. D |
| Primary products specialization ratio | percent.. 75 |
| Value of primary products shipments made in all industries | \$1,000.. 1 382 542 |
| Value of primary products shipments made in this industry | \$1,000.. 1 125 346 |
| Value of primary products shipments made in other industries | \$1,000.. 257 196 |
| Coverage ratio | percent.. 81 |
| Value added | \$1,000.. 594 466 |
| Total inventories, beginning of year | \$1,000.. 205 267 |
| Finished goods inventories | \$1,000.. 90 984 |
| Work-in-process inventories | \$1,000.. 40 917 |
| Materials and supplies inventories | \$1,000.. 73 366 |
| Total inventories, end of year | \$1,000.. 196 697 |
| Finished goods inventories | \$1,000.. 75 687 |
| Work-in-process inventories | \$1,000.. 29 304 |
| Materials and supplies inventories | \$1,000.. 91 706 |
| Gross value of depreciable assets (acquisition costs) at beginning of year | \$1,000.. 733 133 |
| Total capital expenditures (new and used) | \$1,000.. 52 000 |
| Buildings and other structures (new and used) | \$1,000.. 2 359 |
| Machinery and equipment (new and used) | \$1,000.. 49 641 |
| Automobiles, trucks, etc., for highway use | \$1,000.. 414 |
| Computers and peripheral data processing equipment | \$1,000.. 1 237 |
| All other expenditures for machinery and equipment | \$1,000.. 47 990 |
| Total retirements | \$1,000.. 17 355 |
| Gross value of depreciable assets at end of year | \$1,000.. 767 778 |
| Depreciation charges during year | \$1,000.. 40 436 |
| Total rental payments | \$1,000.. 10 055 |
| Buildings and other structures | \$1,000.. 5 754 |
| Machinery and equipment | \$1,000.. 4 301 |
| Total other expenses ⁴ | \$1,000.. 73 952 |
| Response coverage ratio ⁵ | percent.. 92 |
| Repair and maintenance services of buildings and/or machinery ⁴ | \$1,000.. 23 347 |
| Communications services ⁴ | \$1,000.. 1 231 |
| Legal services ⁴ | \$1,000.. 703 |
| Accounting, auditing, and bookkeeping services ⁴ | \$1,000.. 507 |
| Advertising and promotional services ⁴ | \$1,000.. 636 |
| Expensed computer hardware and supplies and purchased computer services ⁴ | \$1,000.. 1 552 |
| Refuse removal (including hazardous waste) services ⁴ | \$1,000.. 2 966 |
| Management consulting and administrative services ⁴ | \$1,000.. 7 287 |
| Taxes and license fees ⁴ | \$1,000.. 2 850 |
| All other expenses ⁴ | \$1,000.. 32 874 |

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

| Employment size class | E ¹ | All establishments ² | All employees | | Production workers | | | Value added (\$1,000) | Total cost of materials (\$1,000) | Total value of shipments (\$1,000) | Total capital expenditures (\$1,000) |
|---|----------------|---------------------------------|---------------------|-------------------|---------------------|---------------|-----------------|-----------------------|-----------------------------------|------------------------------------|--------------------------------------|
| | | | Number ³ | Payroll (\$1,000) | Number ³ | Hours (1,000) | Wages (\$1,000) | | | | |
| 322225, Laminated aluminum foil manufacturing for flexible packaging uses | | | | | | | | | | | |
| All establishments | — | 42 | 4 749 | 220 058 | 3 528 | 7 513 | 147 217 | 594 466 | 907 111 | 1 528 487 | 52 000 |
| Establishments with— | | | | | | | | | | | |
| 1 to 4 employees | 9 | 2 | a | D | D | D | D | D | D | D | D |
| 5 to 9 employees | 9 | 5 | 29 | 1 213 | 20 | 43 | 764 | 2 531 | 3 014 | 5 572 | 265 |
| 10 to 19 employees | 9 | 2 | b | D | D | D | D | D | D | D | D |
| 20 to 49 employees | 1 | 9 | e | D | D | D | D | D | D | D | D |
| 50 to 99 employees | 1 | 10 | 746 | 34 582 | 528 | 1 157 | 22 751 | 105 601 | 148 045 | 255 900 | 6 877 |
| 100 to 249 employees | 1 | 9 | 1 272 | 61 576 | 907 | 2 048 | 39 628 | 183 885 | 320 313 | 508 079 | 20 778 |
| 250 to 499 employees | — | 4 | 1 291 | 51 432 | 1 060 | 2 325 | 39 825 | 136 275 | 231 947 | 375 359 | 7 933 |
| 500 to 999 employees | — | — | — | — | — | — | — | — | — | — | — |
| 1,000 to 2,499 employees | — | 1 | g | D | D | D | D | D | D | D | D |
| 2,500 employees or more | — | — | — | — | — | — | — | — | — | — | — |
| Administrative records ⁴ | 9 | 9 | 134 | 6 084 | 100 | 233 | 4 125 | 13 009 | 16 625 | 29 634 | 1 231 |

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

| Industry or product class code | Industry or primary product class | All establishments ¹ | All employees | | Production workers | | | Value added (\$1,000) | Total cost of materials (\$1,000) | Total value of shipments (\$1,000) | Total capital expenditures (\$1,000) |
|--------------------------------|---|---------------------------------|---------------------|-------------------|---------------------|---------------|-----------------|-----------------------|-----------------------------------|------------------------------------|--------------------------------------|
| | | | Number ² | Payroll (\$1,000) | Number ² | Hours (1,000) | Wages (\$1,000) | | | | |
| 322225 | Laminated aluminum foil manufacturing for flexible packaging uses | 42 | 4 749 | 220 058 | 3 528 | 7 513 | 147 217 | 594 466 | 907 111 | 1 528 487 | 52 000 |
| 3222250 | Laminated aluminum foil rolls and sheets for flexible packaging uses (converting and printing or converting only) | 42 | 4 749 | 220 058 | 3 528 | 7 513 | 147 217 | 594 466 | 907 111 | 1 528 487 | 52 000 |

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. **Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| Product code | Product | Number of companies with shipments of \$100,000 or more | Quantity of production for all purposes | Product shipments | |
|--------------|--|---|---|-------------------|------------------------|
| | | | | Quantity | Value (\$1,000) |
| 322225 | Laminated aluminum foil manufacturing for flexible packaging uses | 2002.. N 1997.. N | X X | X X | 1 382 542 1 411 708 |
| 3222250 | Laminated aluminum foil rolls and sheets for flexible packaging uses (converting and printing or converting only) | 2002.. N 1997.. N | X X | X X | 1 382 542 1 411 708 |
| 32222501 | Laminated aluminum film/foil (without paper) multiweb combinations, rolls and sheets for flexible packaging uses | 2002.. N 1997.. N | X X | X X | 499 379 444 679 |
| 3222250101 | Laminated aluminum film/foil (without paper) multiweb combinations, rolls and sheets for flexible packaging uses | mil lb. 2002.. 31 1997.. 26 | X X | S S | 499 379 444 679 |
| 32222502 | Extrusion laminated aluminum foil/paper combinations, rolls and sheets for flexible packaging uses | 2002.. N 1997.. N | X X | X X | 232 963 226 872 |
| 3222250206 | Extrusion laminated aluminum foil/paper combinations, rolls and sheets for flexible packaging uses | mil lb. 2002.. 17 1997.. 21 | X X | P96.1 94.9 | 232 963 226 872 |
| 32222503 | Adhesive or wax laminated aluminum foil/paper combinations, rolls and sheets for flexible packaging uses | 2002.. N 1997.. N | X X | X X | 312 660 368 136 |
| 3222250311 | Adhesive or wax laminated aluminum foil/paper combinations, rolls and sheets for flexible packaging uses | mil lb. 2002.. 17 1997.. 19 | X X | P179.8 P184.1 | 312 660 368 136 |
| 32222505 | Other laminated aluminum foils, including laminated aluminum paper/poly and foil/poly combinations (including foil/foil), rolls and sheets for flexible packaging uses | 2002.. N 1997.. N | X X | X X | 279 811 N |
| 3222250516 | Other laminated aluminum foils, including laminated aluminum paper/poly and foil/poly combinations (including foil/foil), rolls and sheets for flexible packaging uses | mil lb. 2002.. 18 1997.. N | X X | q131.6 N | 279 811 N |
| 3222250Y | Laminated aluminum foil rolls and sheets for flexible packaging uses, nsk, total | 2002.. N 1997.. N | X X | X X | 57 729 26 084 |
| 3222250YWW | Laminated aluminum foil rolls and sheets for flexible packaging uses, nsk, for nonadministrative-record establishments | 2002.. N 1997.. N | X X | X X | 28 572 23 723 |
| 3222250YWY | Laminated aluminum foil rolls and sheets for flexible packaging uses, nsk, for administrative-record establishments | 2002.. N 1997.. N | X X | X X | 29 157 2 361 |

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Not applicable for this report.]

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| Material code | Material consumed | Quantity | Delivered cost (\$1,000) |
|---------------|--|----------|--------------------------|
| 322225 | Laminated aluminum foil manufacturing for flexible packaging uses | | |
| 00900001 | Total materials2002.. | X | 858 860 |
| |1997.. | X | 958 272 |
| 32212006 | Paper2002.. | X | 175 452 |
| |1997.. | X | N |
| 33131507 | Aluminum and aluminum-base alloy plain foil mil lb.2002.. | P83.3 | 112 401 |
| |1997.. | P82.0 | 120 025 |
| 32222503 | Converted aluminum foil (quantity represents metal content) mil lb.2002.. | P56.2 | 93 289 |
| |1997.. | P82.9 | 135 996 |
| 33200089 | Other fabricated metal products (excluding forgings) mil lb.2002.. | D | D |
| |1997.. | D | D |
| 32521115 | Plastics resins (excluding vinyl) consumed in the form of granules, pellets, powders, liquids, etc.2002.. | X | 65 382 |
| |1997.. | X | N |
| 32610013 | Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes2002.. | X | 143 730 |
| |1997.. | X | 250 395 |
| 32500069 | Other chemicals and allied products mil lb.2002.. | D | D |
| |1997.. | D | D |
| 32552005 | Glues and adhesives, including synthetic resin adhesives mil lb.2002.. | P39.1 | 43 624 |
| |1997.. | P30.3 | 39 737 |
| 32591003 | Printing inks mil lb.2002.. | P24.9 | 45 691 |
| |1997.. | 27.6 | 57 721 |
| 32221001 | Paperboard containers, boxes, and corrugated paperboard2002.. | X | 8 394 |
| |1997.. | X | N |
| 00970099 | All other materials and components, parts, containers, and supplies2002.. | X | 107 467 |
| |1997.. | X | 265 559 |
| 00971000 | Materials, ingredients, containers, and supplies, nsk2002.. | X | 35 001 |
| |1997.. | X | 21 550 |

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.